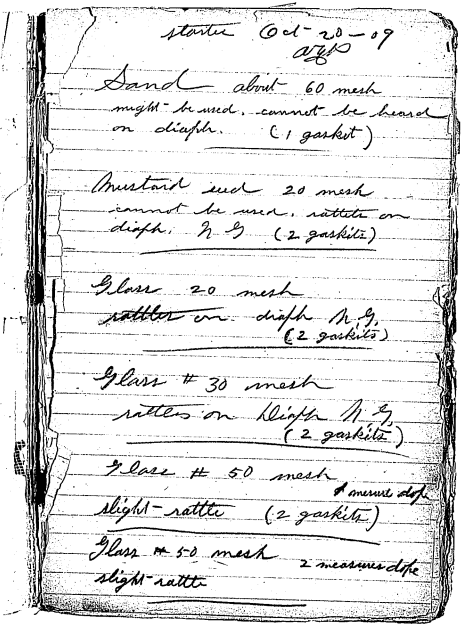
Notebook, N-09-10-20

This notebook covers the period October-December 1909. It contains notes and drawings by Alexander N. Pierman regarding phonograph recording apparatus. Several entries indicate that some of this work may have been performed at Edison's laboratory at Fort Myers, Florida. At the end of the book are phonograph drawings by Edison with the notation "Fortune teller—." Inserted into the book are notes and drawings by Edison, including instructions from Edison to Pierman regarding the experiments. The front cover is labeled "Phono Recording." The pages are unnumbered, and several pages have been removed from the beginning of the book. Approximately 30 pages have been used.



starter Oct-20-09
AJH

Sand about 60 mesh
might be used, cannot be heard
on diaph. (1 gasket)

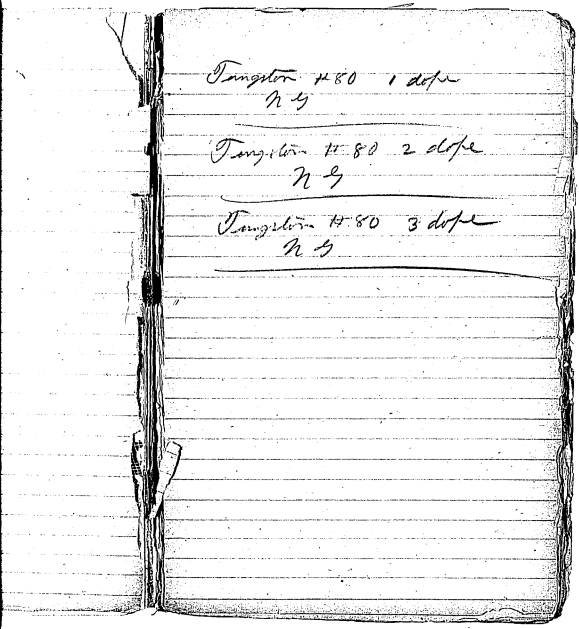
Mustard seed 20 mesh
cannot be used, rattles on
diaph. N G (2 gaskets)

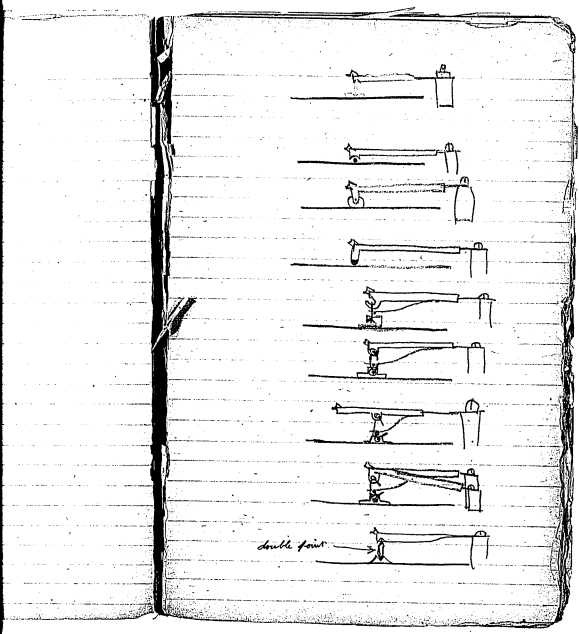
Glass 20 mesh
~~rattles~~ on diaph N G,
(2 gaskets)

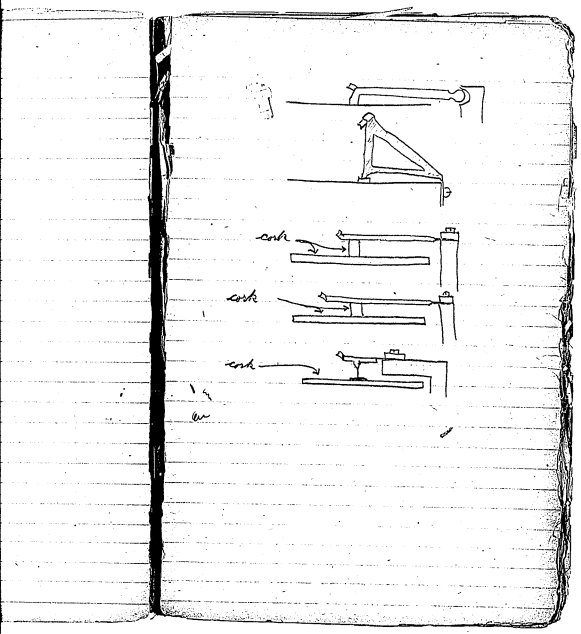
Glass # 30 mesh
rattles on diaph N G
(2 gaskets)

Glass # 50 mesh
slight-rattle (2 gaskets)
1 measures diaph

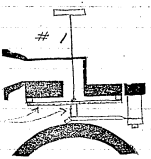
Glass # 50 mesh
slight-rattle
2 measures diaph


Tungsten #80 1 dose
N G
Tungsten #80 2 dose
N G
Tungsten #80 3 dose
N G


double fair


cork
cork
cork

O.K on standard time Dec 8 – 09
AJSP

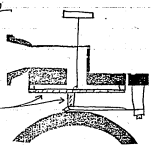


Cork diaphragm 1/32 thick with one layer of tissue paper fastened on with dope made of Castor Oil + Gum Rosin. The cork side of diaphragm out.

Amplitude of diaphragm adjusted by means of screw in center, dope between screw point and diaphragm.

O.K on standard time Dec 9-09

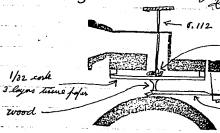
#2



Same as #1 except 3 layers of tissue paper used on this diaphragm

Nov 15–09

#3



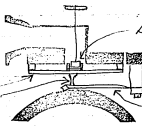
Same as #1 & #2 except the point holder is supported by a pine wood strut instead of cork. Louder than #1 & #2.

O.K.

on slow & fast piano, talking, yelling.

Dec 17 - 09

#4

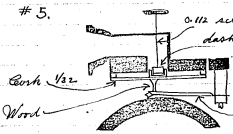


Very good but a little sensitive.

Dec 21 – 09

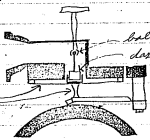
VLP

5.



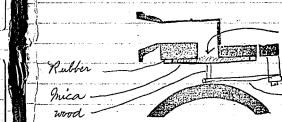
This is the best Recorder on piano, also works fine on voice, will not blast.

#6



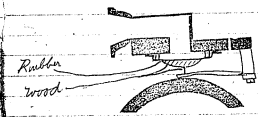
Same as #5 except ball + socket

Dampening exp. Fld

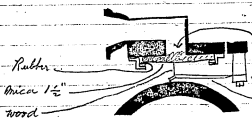


steadily till stop blast

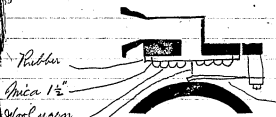
Same as above except 1½ in dia.



Fair not good

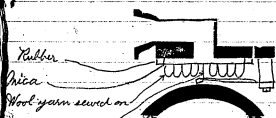


Good Reed for trial at Orange



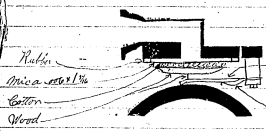
(two strands yarn used)

Good Ref for trial at Orange

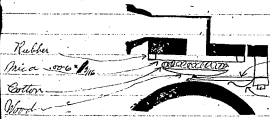


Same as above

N.G. four strands yarn used

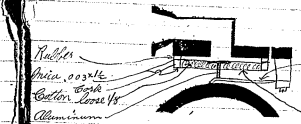


Four Layers cotton inserting pressed down to 3/32 N. G.

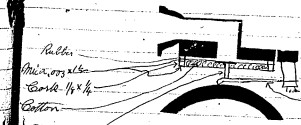


Same as above except 8 layers cotton pressed down to 1/8"

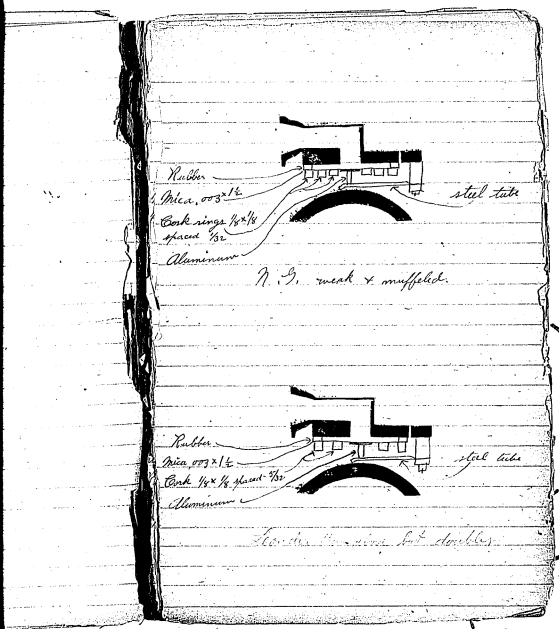
N. G.

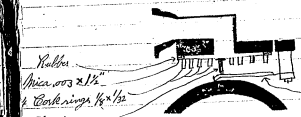


Good tone, very loud, slight flutter in loud notes, reproducer will not hold it.



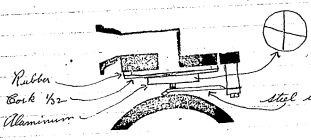
Fair with cotton loose, N.G. with cotton under pressure.


Rubber
Mica, .003 x 1/2
Cork rings 1/8 x 1/8 spaced 1/32
Aluminum
steel tube
N. G. weak & muffled.
Rubber
Mica .003 x 1/2
Cork 1/8 x 1/8 spaced 1/32
Aluminum
steel tube

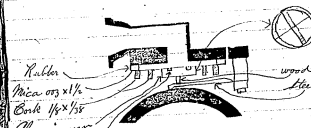


Loud but doubles

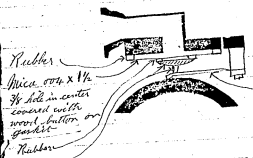
Fairly loud not enough sweetness between rubber



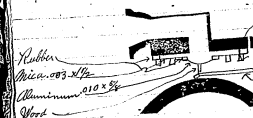
R. G.



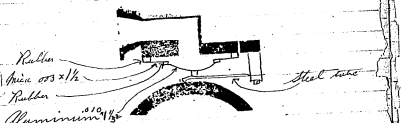
Considered good shell for trial at Orange



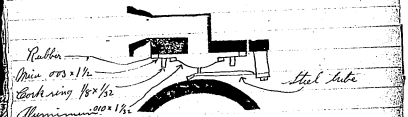
This is the most sensitive construction I ever tried, can be made work perfect.



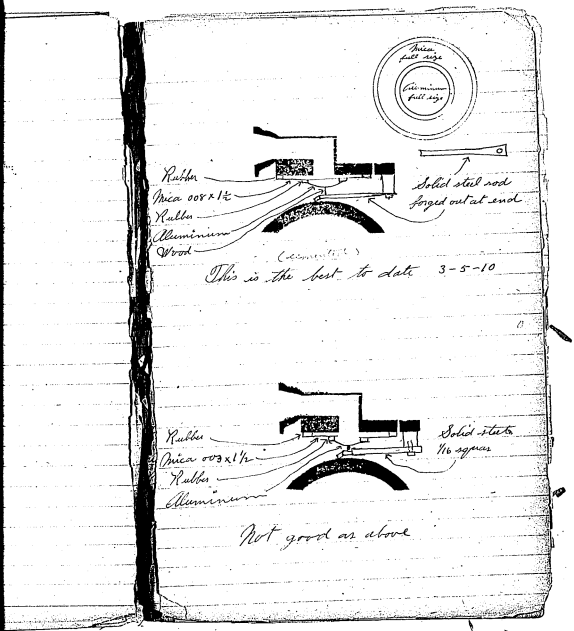
Sensitive, fair tone. Sold for trial at Amy's

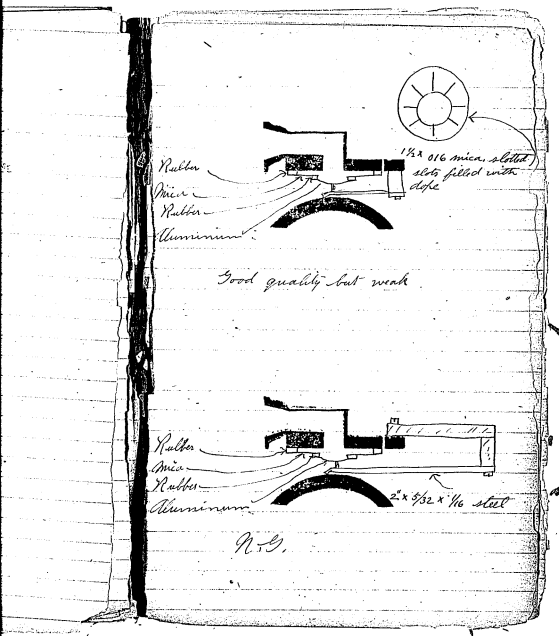


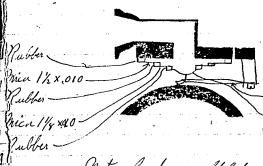
Sensitive. very loud tone. unnatural.



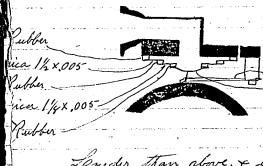
As above not so sensitive.


Mica
Aluminum
Rubber
Mica .008 x 1½
Rubber
Aluminum
Wood
Solid steel rod
forged out at end
This is the best to date 3-5-10
Rubber
Mica .003 x 1½
Rubber
Aluminum
Solid steel
⅛ square
Not good as above

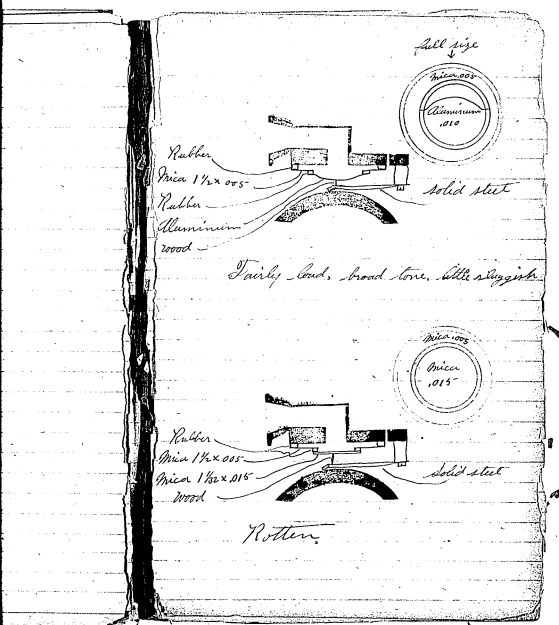

Rubber
Mica
Rubber
Aluminum
1 1/32 .016 mica slotted slots filled with dope
Good quality but weak
Rubber
Mica
Rubber
Aluminum
2" x 9/32 x 1/16 steel
N.G.

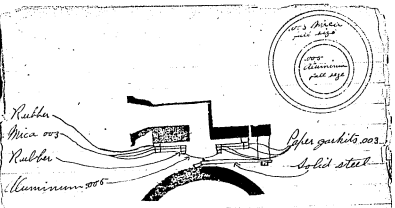


Not loud, muffled

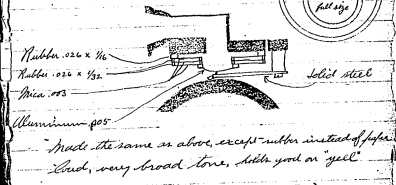


Louder than above + clearer


Full size
Mica .005
Aluminum .010
Rubber
Mica 1½ x .005
Rubber
Aluminum
Wood
solid steel
Fairly loud, broad tone, little ringing
Mica .005
Mica .015
Rubber
Mica 1½ x .005
Mica 1½ x .015
Wood
solid steel
Rotten.

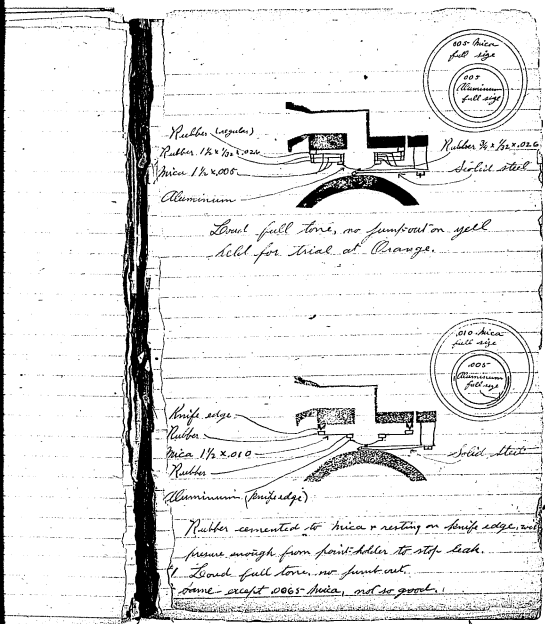


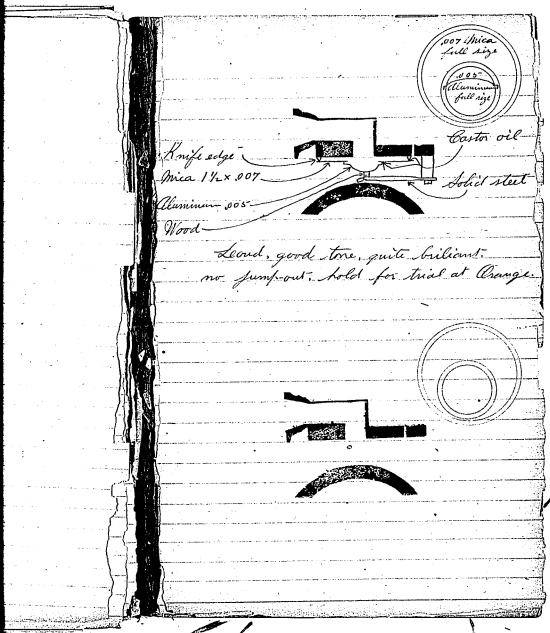
This quantity not bad, holds well, not enough "give" to paper gaskets (will try rubber)



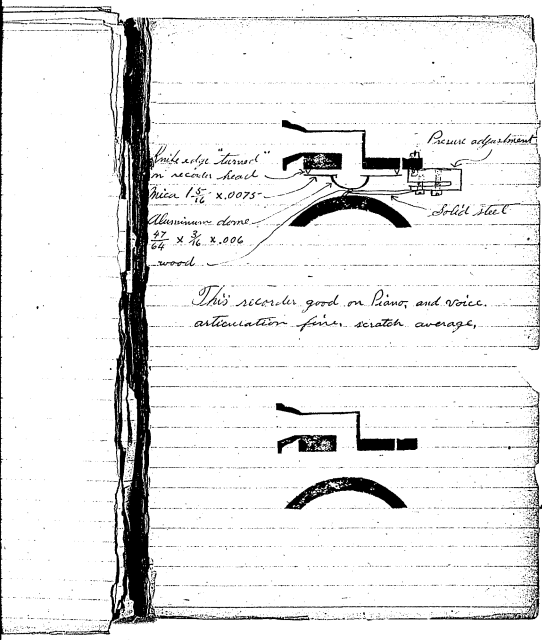
Made the same as above, except rubber instead of paper. Good, very broad stove, holds good as "gasket"

(will try .005 mica. It made stove brighter + thinner.)


.005 Mica full size
.007 Aluminium full size
Rubber (angular)
Rubber 1/2 x 1/32 x .022
Mica 1/2 x .006
Rubber 3/4 x 1/32 x .026
Solid steel
Aluminium
Level full tone, no jump out on yell
bell for trial at Orange.
.010 Mica full size
.005 Aluminium full size
Knife edge
Rubber
Mica 1/2 x .010
Rubber
Solid steel
Aluminium (knife edge)
Rubber cemented to mica & resting on knife edge, with
pressure enough from spiral adder to strip leak.
Level full tone, no jump out.
Same except .0065 Mica, not so good.

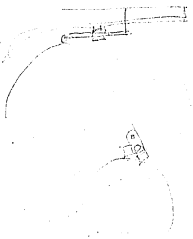


Loud, good tone, quite brilliant.
no jump-out. Held for trial at Orange.

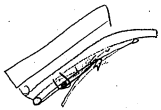


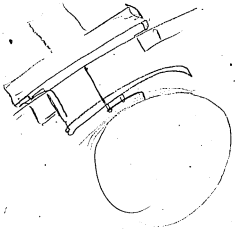
This recorder good on Piano and voice. articulation fine. scratch average.

March 27. 1 Loaves 1,50

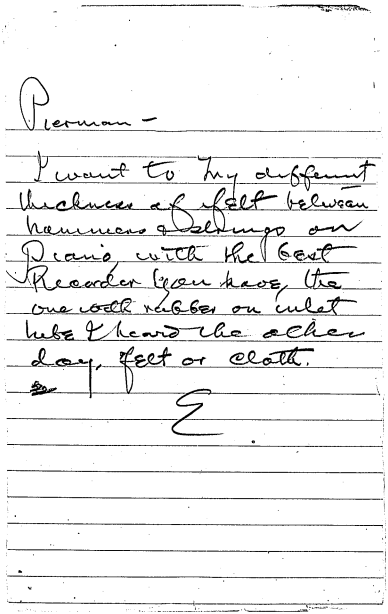


Fortune Teller – N-09-10-20





[ITEM FOUND IN BOOK]

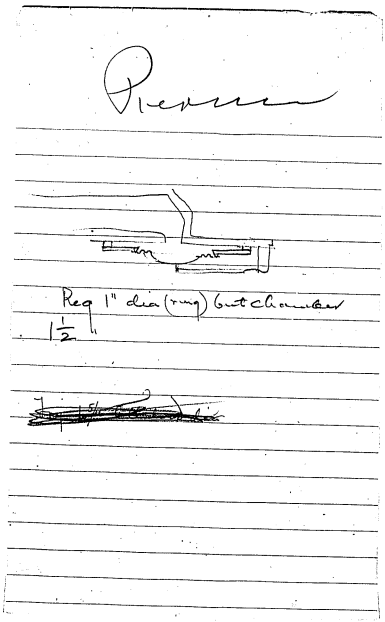


Pierman –

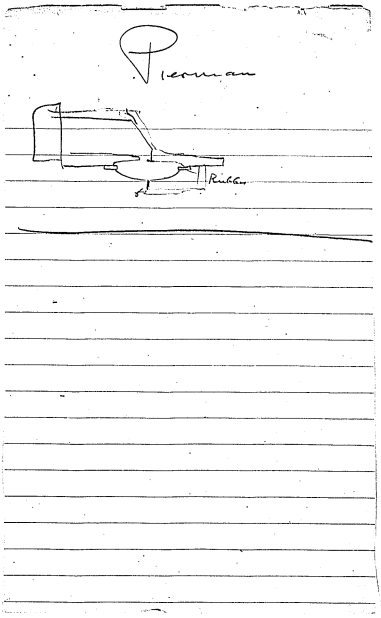
I want to try different thickness of felt between hammers & strings on Piano with the Bent Recorder (you have, the one with rubber on inlet tube) & hear the other day, felt or cloth.

E

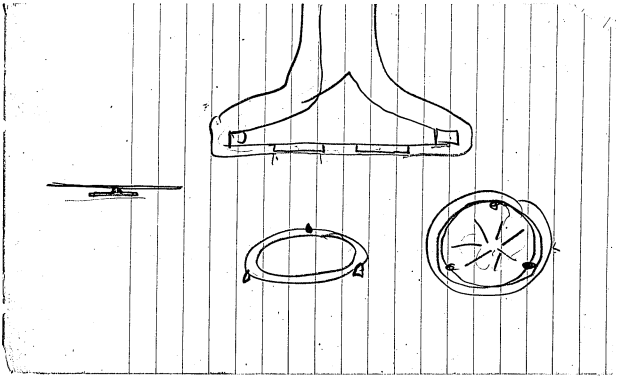
[ITEM FOUND IN BOOK]



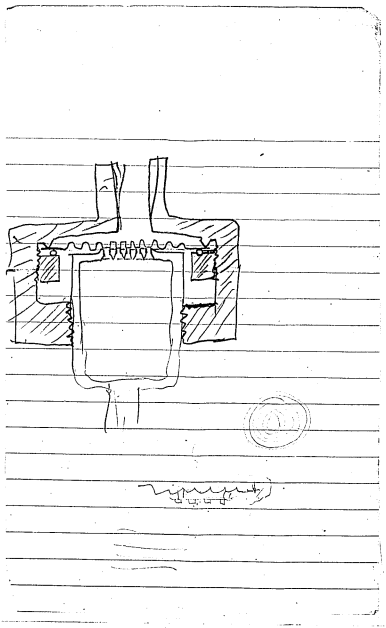
[ITEM FOUND IN BOOK]



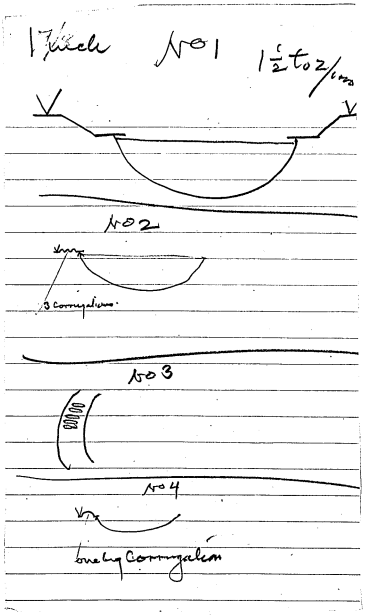
[ITEM FOUND IN BOOK]



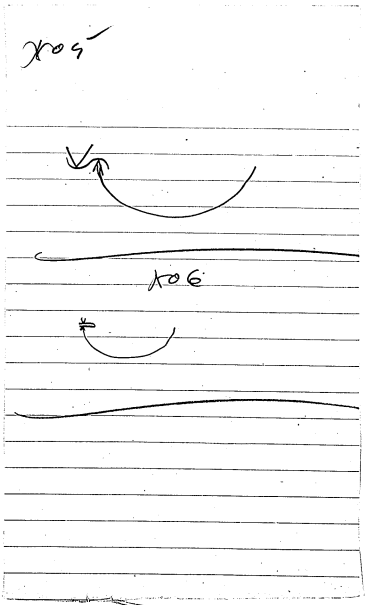
[ITEM FOUND IN BOOK]



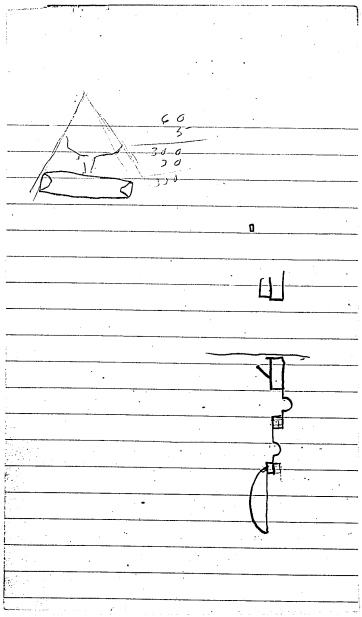
[ITEM FOUND IN BOOK]



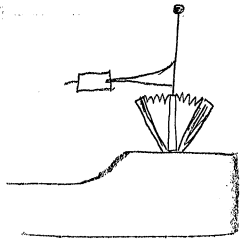
[ITEM FOUND IN BOOK]



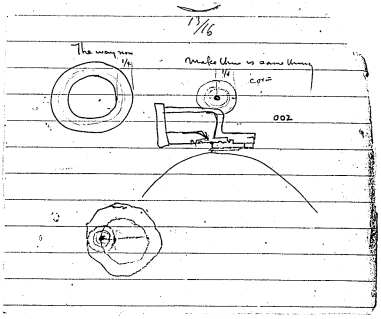
[ITEM FOUND IN BOOK]



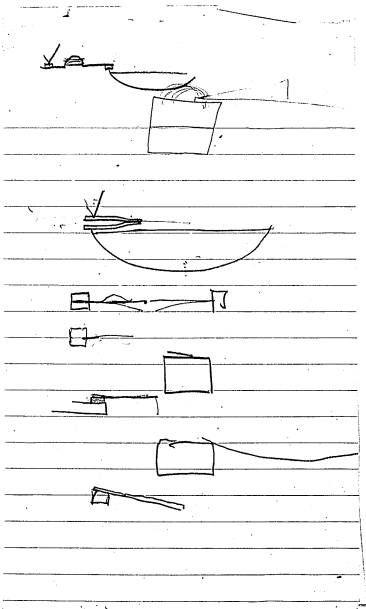
[ITEM FOUND IN BOOK]

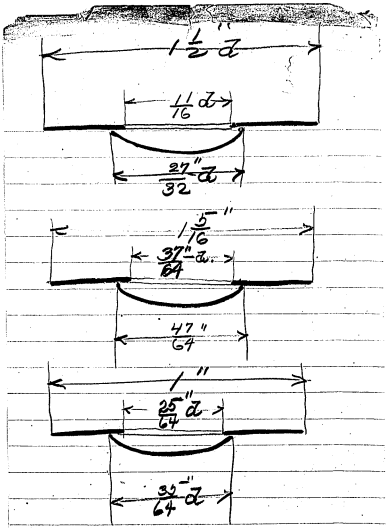


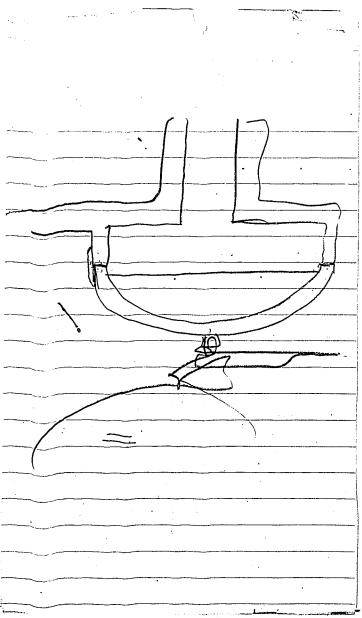
[ITEM FOUND IN BOOK]



[ITEM FOUND IN BOOK]





[ITEM FOUND IN BOOK]

[ON BACK OF PRECEDING PAGE]